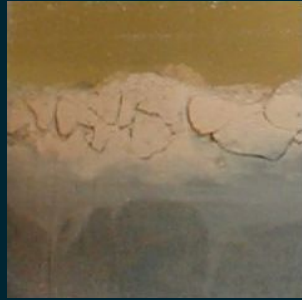
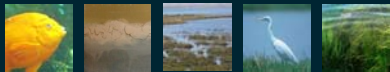


South Bay Power Plant Sediment Quality Evaluation

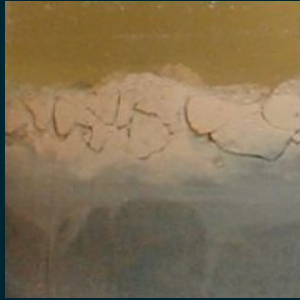


April 4, 2011

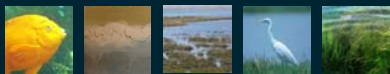


Overview

- South Bay Power Plant (SBPP) Site overview
- Review of MEC 1998 sediment chemistry evaluation
- Evaluation of MEC 1998 data in context of Beneficial Use Impairments (BUIs) and Sediment Quality Objectives (SQOs)
- Conclusions



Site Overview

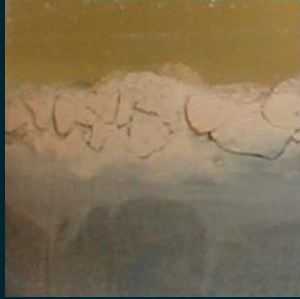


South Bay Power Plant

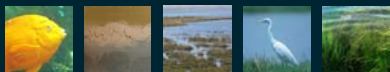


- SDG&E owned and operated SBPP from 1960 to 1998
- Sold to San Diego Unified Port District (SDUPD) in 1998



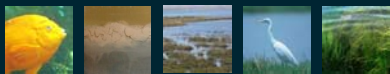


MEC 1998 Study and Results



Sediment Sampling

- October 9, 1998, MEC Analytical Systems, Inc. sampled sediment adjacent to South Bay Power Plant on behalf of the Port of San Diego as part of its pre-purchase environmental due diligence (MEC, 1998)
- Push cores
 - 2-inch diameter cores from 11 stations (22 samples total)
 - Surface to 1.5' to 3.75' below mud line
 - 5 additional samples were analyzed for PCBs in the upper strata (0 – 1.5')
 - Homogenized over the core length
- Analyzed for
 - Metals
 - Polycyclic Aromatic Hydrocarbons (PAHs)
 - Polychlorinated Biphenyls (PCBs) as Aroclors
 - Total Petroleum Hydrocarbons
 - Organochlorine Pesticides
 - Phenols

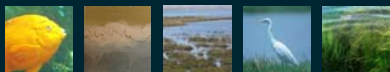


South Bay Power Plant

J-Street Drain

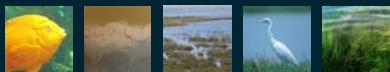
- Samples located near cooling water discharge and in vicinity of SBPP
- Samples located within the immediate vicinity of City of Chula Vista stormwater sources





1998 Metals Data

Station ID	Core Interval (ft)	Concentration in Sediment ^[1, 2] (mg/kg, dw)									
		Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Arsenic	Selenium	Silver	Mercury
A-1	0 - 2.25	0.5	25.7	15.7	13.0	8.9	48.6	5.2	0.4	< 0.2	< 0.04
A-1 Duplicate	0 - 2.25	0.5	25.2	16.6	13.8	9.2	49.5	5.4	0.5	< 0.2	< 0.04
A-1 Average	0 - 2.25	0.5	25.5	16.2	13.4	9.1	49.1	5.3	0.5	< 0.2	< 0.04
A-2	0 - 2.75	0.7	20.3	11.6	8.7	5.8	33.9	3.5	0.2	< 0.1	< 0.03
A-3	0 - 3.75	0.2	9.4	7.4	7.7	4.0	20.8	2.3	0.2	< 0.1	< 0.03
A-4	0 - 2.25	0.3	9.0	6.8	12.8	3.7	22.4	1.9	0.2	< 0.1	< 0.03
A-5	0 - 1.5	0.7	15.7	9.6	12.3	5.9	33.2	2.4	0.2	< 0.1	< 0.03
A-6	0 - 2.75	0.4	12.4	7.1	14.2	4.8	26.4	2.1	0.2	< 0.1	< 0.03
A-7	0 - 3	0.9	19.4	10.0	15.9	6.4	32.1	2.3	0.2	< 0.1	< 0.03
A-8	0 - 3	0.5	23.6	16.9	21.0	8.9	54.2	4.2	0.3	< 0.2	< 0.03
B-1	0 - 3	0.2	10.1	8.5	5.3	3.8	23.7	1.8	0.2	< 0.1	< 0.03
B-2	0 - 1.5	0.2	5.2	9.9	6.3	2.6	29.0	1.3	< 0.1	1.2	< 0.03
B-3	0 - 2	0.2	13.6	16.4	7.8	5.4	42.9	3.6	0.3	< 0.1	< 0.03



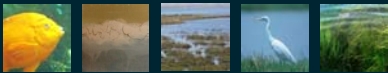
Metals Data: Comparison to Background*

Copper is only present at approximately 10% of San Diego Bay background conditions*, despite presence of copper in cooling water discharge (EPA 3050/6020 M)

Station ID	Core Interval (ft)	Comparison of Concentration of Metals in Sediment to Background Concentration (Site concentration ÷ Background Concentration)									
		Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Arsenic	Selenium	Silver	Mercury
A-1	0 - 2.25	1.52	0.45	0.13	0.25	0.59	0.25	0.69	--	0.18	0.07
A-1 Duplicate	0 - 2.25	1.52	0.44	0.14	0.26	0.61	0.26	0.72	--	0.18	0.07
A-1 Average	0 - 2.25	1.52	0.45	0.13	0.25	0.60	0.26	0.71	--	0.18	0.07
A-2	0 - 2.75	2.12	0.36	0.10	0.16	0.39	0.18	0.47	--	0.09	0.05
A-3	0 - 3.75	0.61	0.16	0.06	0.15	0.27	0.11	0.31	--	0.09	0.05
A-4	0 - 2.25	0.91	0.16	0.06	0.24	0.25	0.12	0.25	--	0.09	0.05
A-5	0 - 1.5	2.12	0.28	0.08	0.23	0.39	0.17	0.32	--	0.09	0.05
A-6	0 - 2.75	1.21	0.22	0.06	0.27	0.32	0.14	0.28	--	0.09	0.05
A-7	0 - 3	2.73	0.34	0.08	0.30	0.43	0.17	0.31	--	0.09	0.05
A-8	0 - 3	1.52	0.41	0.14	0.40	0.59	0.28	0.56	--	0.18	0.05
B-1	0 - 3	0.61	0.18	0.07	0.10	0.25	0.12	0.24	--	0.09	0.05
B-2	0 - 1.5	0.61	0.09	0.08	0.12	0.17	0.15	0.17	--	1.09	0.05
B-3	0 - 2	0.61	0.24	0.14	0.15	0.36	0.22	0.48	--	0.09	0.05
Minimum		0.61	0.09	0.06	0.10	0.17	0.11	0.17	--	0.09	0.05
Average		1.35	0.29	0.10	0.22	0.40	0.19	0.42	--	0.20	0.06
Maximum		2.73	0.45	0.14	0.40	0.61	0.28	0.72	--	1.09	0.07
Background Concentration ^[3]		0.33	57	121	53	15	192	7.5	NL	1.1	0.57



*Background conditions as established for the San Diego Bay Sediment Site: CRWQCB. 2010. Draft Technical Report for Tentative Cleanup and Abatement Order No. R9-2005-0126.



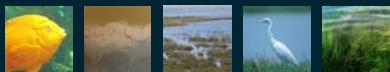
Metals Data: Comparison to Background*

- All metal concentrations are lower than background*, except for Cd and Ag
- Average concentration of cadmium is 1.5X background
- Moderate cadmium concentrations at Site not indicative of Beneficial Use Impairment

Station ID	Core Interval (ft)	Comparison of Concentration of Metals in Sediment to Background Concentration (Site concentration ÷ Background Concentration)	
		Cadmium	Silver
A-1	0 - 2.25	1.52	0.18
A-1 Duplicate	0 - 2.25	1.52	0.18
A-1 Average	0 - 2.25	1.52	0.18
A-2	0 - 2.75	2.12	0.09
A-3	0 - 3.75	0.61	0.09
A-4	0 - 2.25	0.91	0.09
A-5	0 - 1.5	2.12	0.09
A-6	0 - 2.75	1.21	0.09
A-7	0 - 3	2.73	0.09
A-8	0 - 3	1.52	0.18
B-1	0 - 3	0.61	0.09
B-2	0 - 1.5	0.61	1.09
B-3	0 - 2	0.61	0.09
Minimum		0.61	0.09
Average		1.35	0.20
Maximum		2.73	1.09
Background Concentration ^[3]		0.33	1.1



*Background conditions as established for the San Diego Bay Sediment Site: CRWQCB. 2010. Draft Technical Report for Tentative Cleanup and Abatement Order No. R9-2005-0126.



Comparison to Chollas and Paleta Stormwater Cadmium

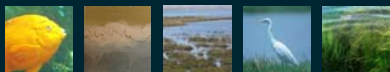
- Average concentration of cadmium in South Bay similar to/lower than Paleta Creek and Chollas Creek*

Cadmium Concentration	South Bay	Chollas	Paleta
Average	0.44	0.63	0.43
St. Dev.	0.25	0.37	0.52
Max.	0.9	1.37	1.59
Min.	0.2	0.29	0.01

- Cadmium at South Bay indicative of urban runoff
 - City of Chula Vista stormwater source likely
 - J-street Drain, Telegraph Creek, Palomar Drain

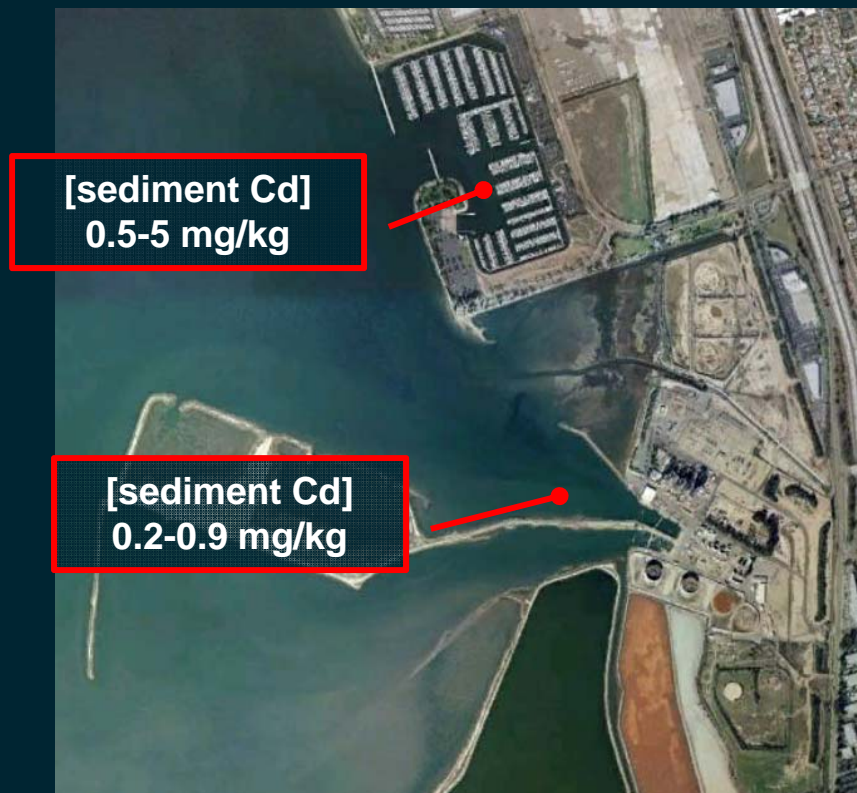


* Southern California Coastal Water Research Project and Space and Naval Warfare Systems Center San Diego, U.S. Navy; Sediment Assessment Study For The Mouths Of Chollas And Paleta Creek, San Diego: Phase I Draft Report , September 2004.



Comparison to Chula Vista Boat Basin

- Range of concentrations of cadmium in South Bay lower than that of sediments in nearby Chula Vista Boat Basin (Smith and Associates et al., 1975)
 - Stormwater or boatyard sources of cadmium rather than SBPP source





PAHs Data

- Most PAHs not detected
- Where PAHs detected, sums below background

Station ID	Core Interval (ft)	Concentration in Sediment (µg/kg, dw)																		Total PAHs	LPAH ^[3]	HPAH ^[3]	LPAH ^[4]	HPAH ^[4]
		Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(ghi)perylene							
A-1	0 - 2.25	< 18	< 18	< 18	< 18	< 18	< 18	< 18	23	< 18	< 18	< 18	< 18	19	< 18	< 18	< 18	42	9	42	0	42		
A-2	0 - 2.75	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	7.5	7.5	0	0		
A-3	0 - 3.75	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	7	7	0	0		
A-4	0 - 2.25	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	7	7	0	0		
A-5	0 - 1.5	< 14	< 14	< 14	< 14	< 14	< 14	< 14	19	< 14	< 14	< 14	< 14	20	< 14	< 14	< 14	39	7	39	0	39		
A-5 Duplicate	0 - 1.5	< 14	< 14	< 14	< 14	< 14	< 14	< 14	23	< 14	< 14	16	< 14	17	< 14	16	14	86	7	86	0	40		
A-5 Average	0 - 1.5	< 14	< 14	< 14	< 14	< 14	< 14	< 14	21	< 14	< 14	16	< 14	19	< 14	16	14	63	7	62.5	0	39.5		
A-6	0 - 2.75	< 14	< 14	< 14	< 14	< 14	< 14	< 14	20	< 14	< 14	< 14	22	< 14	< 14	< 14	< 14	42	7	42	0	20		
A-7	0 - 3	< 14	< 14	< 14	< 14	< 14	< 14	< 14	16	< 14	< 14	< 14	< 14	14	< 14	< 14	< 14	30	7	30	0	30		
A-8	0 - 3	< 16	< 16	< 16	< 16	< 16	< 16	24	39	21	23	34	21	34	< 16	28	33	257	8	257	0	141		
B-1	0 - 3	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	7	7	0	0		
B-2	0 - 1.5	< 14	< 14	< 14	< 14	< 14	< 14	< 14	21	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	21	7	21	0	21		
B-3	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	7.5	7.5	0	0		
PAH Categorization (Exponent 2003)		LPAH	LPAH	LPAH	LPAH	LPAH	LPAH	HPAH	HPAH	HPAH	HPAH	HPAH	HPAH	HPAH	HPAH	HPAH	HPAH	--	--	--	--	--		
PAH Categorization (Bay et al. 2009)		LPAH		LPAH	LPAH	LPAH	LPAH	HPAH	HPAH	HPAH	HPAH			HPAH	HPAH			--	--	--	--	--		

Notes

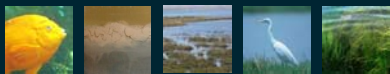
¹ These are the results from the sampling and analysis of sediments collected adjacent to the SDG&E South Bay Power Plant. The sampling was conducted by MEC Analytical Systems, Inc for the Port of San Diego on October 9, 1998 (MEC, 1998).

² µg/kg, dw = microgram per kilogram, dry weight.

³ PAH Categorization is based on Exponent 2003. LPAH = low molecular weight polycyclic aromatic hydrocarbon. HPAH = high molecular weight polycyclic aromatic hydrocarbon. Perylene and Benzo[e]pyrene were not analyzed.

⁴ PAH Categorization is based on the Sediment Quality Assessment Draft Technical Support Manual (Bay et al. 2009). Please note, the following LPAHs were not analyzed in MEC (1998): 1-methylnaphthalene, 2-methylnaphthalene, 2,6-dimethylnaphthalene, Biphenyl, and 1-methylphenanthrene. Also, please note the following HPAHs were not analyzed in MEC (1998): Benzo[e]pyrene and Perylene. LPAH and HPAH are calculated as the sum of the detect values. If no values for a station are detected, the station is treated as having a concentration of zero (Bay et al. 2009).

⁵ PAH = Polycyclic Aromatic Hydrocarbons.



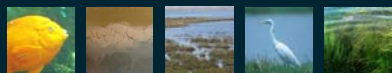
PAHs Data

- Concentrations for total PAH, LPAH, and HPAH summed detected results only as in Sediment Quality Objectives guide: SCCRWP. 2009. Sediment Quality Assessment Draft Technical Support Manual and CRWQCB (2010)
- Detected concentrations of PAHs in South Bay sediment below background*
 - Highest HPAH concentration (257 µg/kg), ~40% of background

Station ID	Core Interval (ft)	Concentration in Sediment (µg/kg, dw)	
		HPAH ^[3]	HPAH ^[4]
A-1	0 - 2.25	42	42
A-2	0 - 2.75	7.5	0
A-3	0 - 3.75	7	0
A-4	0 - 2.25	7	0
A-5	0 - 1.5	39	39
A-5 Duplicate	0 - 1.5	86	40
A-5 Average	0 - 1.5	62.5	39.5
A-6	0 - 2.75	42	20
A-7	0 - 3	30	30
A-8	0 - 3	257	141
B-1	0 - 3	7	0
B-2	0 - 1.5	21	21
B-3	0 - 2	7.5	0

*Background conditions as established for the San Diego Bay Sediment Site: CRWQCB. 2010. Draft Technical Report for Tentative Cleanup and Abatement Order No. R9-2005-0126.

HPAH background:
663 µg/kg



PCBs Data

- Over half the samples contained no detectable concentrations of Aroclors
- Highest concentration 94 $\mu\text{g/kg}$
- Average concentration 28 $\mu\text{g/kg}$

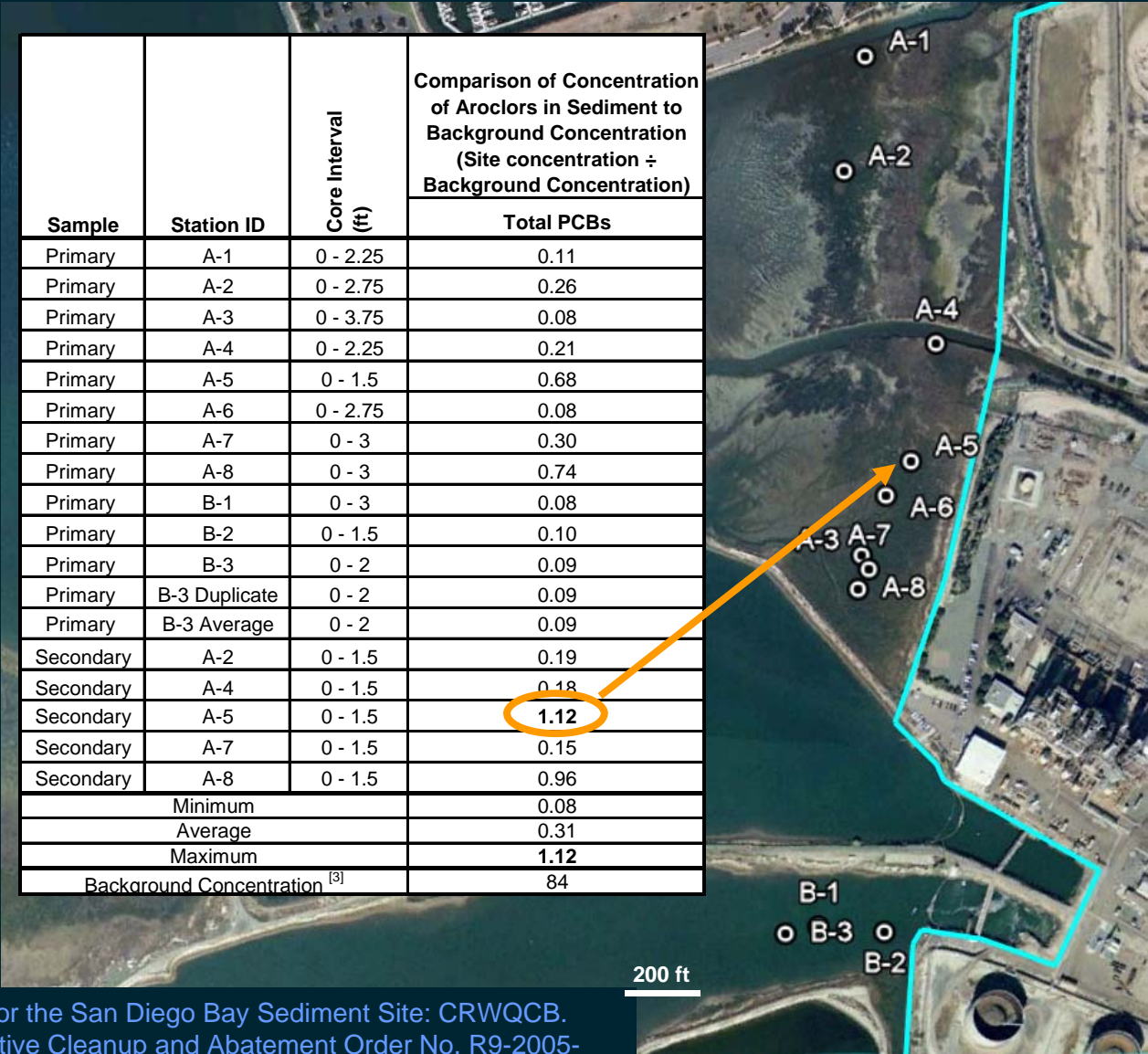
Sample	Station ID	Core Interval (ft)	Concentration in Sediment ($\mu\text{g/kg}$, dw)							
			Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
Primary	A-1	0 - 2.25	< 18	< 18	< 18	< 18	< 18	< 18	< 18	9
Primary	A-2	0 - 2.75	< 15	< 15	< 15	< 15	< 15	< 15	22	22
Primary	A-3	0 - 3.75	< 14	< 14	< 14	< 14	< 14	< 14	< 14	7
Primary	A-4	0 - 2.25	< 14	< 14	< 14	< 14	< 14	< 14	18	18
Primary	A-5	0 - 1.5	< 14	< 14	< 14	< 14	< 14	< 14	57	57
Primary	A-6	0 - 2.75	< 14	< 14	< 14	< 14	< 14	< 14	< 14	7
Primary	A-7	0 - 3	< 14	< 14	< 14	< 14	< 14	< 14	25	25
Primary	A-8	0 - 3	< 16	< 16	< 16	< 16	< 16	< 16	62	62
Primary	B-1	0 - 3	< 14	< 14	< 14	< 14	< 14	< 14	< 14	7
Primary	B-2	0 - 1.5	< 14	< 17	< 17	< 17	< 17	< 17	< 17	8.5
Primary	B-3	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 15	7.5
Primary	B-3 Duplicate	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 15	7.5
Primary	B-3 Average	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 15	7.5
Secondary	A-2	0 - 1.5	< 32	< 32	< 32	< 32	< 32	< 32	< 32	16
Secondary	A-4	0 - 1.5	< 30	< 30	< 30	< 30	< 30	< 30	< 30	15
Secondary	A-5	0 - 1.5	< 30	< 30	< 30	< 30	< 30	94	< 30	94
Secondary	A-7	0 - 1.5	< 26	< 26	< 26	< 26	< 26	< 26	< 26	13
Secondary	A-8	0 - 1.5	< 33	< 33	< 33	< 33	< 33	81	< 33	81

Sum of PCB Aroclors calculated as sum of detected Aroclors; if no Aroclors were detected, the sum is equivalent to one-half the highest detection limit.

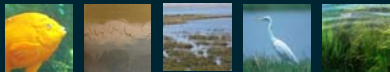


PCB Data: Comparison to Background*

- Average concentration (28 µg/kg) 0.3X background (84 µg/kg)*
- Only one sample (A-5) above background at 1.12X background

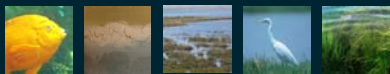


*Background conditions as established for the San Diego Bay Sediment Site: CRWQCB. 2010. Draft Technical Report for Tentative Cleanup and Abatement Order No. R9-2005-0126.



Results - Other

- The following chemical analytes were below detection limits
 - Total Petroleum Hydrocarbons
 - Organochlorine Pesticides
 - Phenols



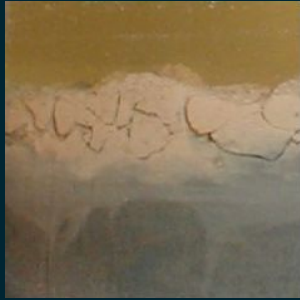
Sediment Sampling Results Summary

- Concentrations for all chemicals were consistent with or lower than San Diego Bay background* concentrations (CRWQCB, 2010)
 - Highest concentration of chemical (relative to background) was cadmium
 - Average concentration of cadmium is 1.5X background
 - Not associated with cooling water (10-20% of background in sediment near cooling water outfall)
 - Likely to be associated with stormwater runoff and/or other local sources
 - Average concentration of PCBs 0.3X background
 - Average concentration of copper 0.09X background

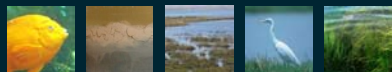
COC	Concentrations in sediment (mg/kg for metals, µg/kg for organics)			
	Post-Remedy (Shipyard Sediment Site)		South Bay Power Plant	
	SWAC	Station Maximum	Average	Station Maximum
Copper	159	320	11	17
Mercury	0.68	2.1	< 0.04	< 0.04
HPAH	2,451	15,850	45	257
PCB	194	495	28	94
TBT	110	410	NA	NA
Arsenic	8.7	18	3	5
Cadmium	0.2	0.46	0.44	0.90
Lead	66	100	11	21
Zinc	221	390	33	54

Both average and maximum concentrations of chemicals (except Cd) at South Bay lower than expected post-remedy SWAC conditions at the San Diego Shipyard Sediment Site

*Background conditions as established for the San Diego Bay Sediment Site and Post-remedy shipyard conditions predicted for San Diego Bay Sediment Site: CRWQCB. 2010. Draft Technical Report for Tentative Cleanup and Abatement Order No. R9-2005-0126.

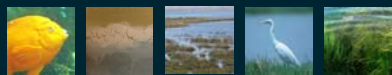


Application of MEC 1998 Data to SQOs and Considerations for BUIs



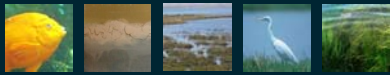
Sediment Quality Objectives

- Human health and aquatic dependent wildlife
 - SQOs in development; Current SQO guidance is to proceed using case-by-case basis using traditional risk assessment approaches (CRWQCB, 2011)
 - Similarity of concentrations of bioaccumulative chemicals in Site sediment to background indicates an absence of Site-specific Human Health and Aquatic dependent wildlife BUIs
- Aquatic life
 - Full SQO analysis requires chemistry, benthic, and toxicity data for surface sediment (0-5 cm)
 - Chemistry-only SQO analysis applied to existing MEC (1998) core data to evaluate SQO chemistry line of evidence (next slides)



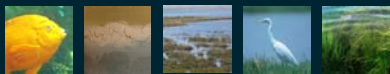
SQO Analysis (Chemistry Only)

- Analysis used MEC 1998 data to generate CSI and CA-LRM metrics for interpretation within SQO framework
 - Sum of PCBs based on Aroclors, not congeners
 - Where present, additional surface cores (0-1.5') also evaluated (did not affect results)
 - Analysis not limited to 0-5 cm layer, but includes deeper layers that would be expected to exhibit higher concentrations reflective of historical contributions
- Any new SQO analysis based upon samples of present 0-5 cm layer would not be attributable to SDG&E operations (assuming 1 cm/year sediment deposition)



SQO Analysis (Chemistry Only)

- Some pesticides were excluded from analysis due to elevated detection limits (inclusion resulted in false positives)
 - Chlordanes excluded from analysis (assumed to be 0)
 - Chlordane was below detection limits (27-35 $\mu\text{g/kg}$) at each sediment station
 - No evidence of chlordane usage or detections at South Bay Power Plant
 - Trans-nonachlor not measured in sediment (assumed to be 0)
 - Not expected to be associated with SBPP
 - Dieldrin, DDTs, DDDs, and DDEs included (1/2 detection limit) despite lack of evidence for use at SBPP



SQO Analysis (Chemistry Only)

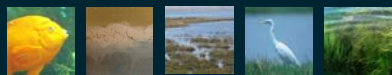
- All stations “low exposure” or “minimal exposure” for sediment chemistry leg of the SQOs, indicating absence of chemical Aquatic Life BUI

Station	CSI Value	CA LRM Value	Integrated Exposure Category ^[1]	
			Value	Category
A-1	1	2	2	Low
A-2	1	2	2	Low
A-3	1	<u>1</u>	1	Minimal
A-4	1	1	1	Minimal
A-5	1	2	2	Low
A-6	1	1	1	Minimal
A-7	1	3	2	Low
A-8	1	2	2	Low
B-1	1	<u>1</u>	1	Minimal
B-2	1	<u>1</u>	1	Minimal
B-3	1	1	1	Minimal

Integrated Exposure Category ^[1]	
1	Minimal
2	Low
3	Moderate
4	High

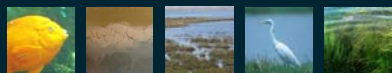
Notes

¹ Integrated Exposure Categories are referenced from Bay et al. (2009) and are based on the average of the CSI and CA LRM score values (rounded upwards to the nearest whole number). Italicized and underlined CA LRM values are based exclusively on concentrations below the detection limit.



SQO Analysis (Chemistry Only)

- Any toxicity or benthic community degradation observed in a full SQO study would not be attributable to SDG&E operations since all COCs are accounted for in this analysis (PCBs, PAHs, metals)
 - Recent observations of benthic community degradation due to non-chemical (physical) stressors
 - Because chemical concentrations measured in 1998 are similar to background, toxicity test results would likely reflect background conditions
 - Adverse effects (if any) in toxicity tests would implicate other chemicals not associated with SBPP (e.g., pyrethroid pesticides)



Benthic Community

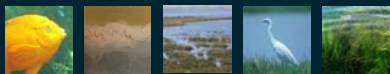
- Degradation of the benthic community limited to cooling water discharge channel (CRWQCB, 2010)
 - “degradation to the biotic communities is due to several factors, including elevated temperature, flow volume, and flow velocity” (CRWQCB, 2010)
- Physical impacts since 1998 not related to SDG&E
- Benthic community likely to recover quickly from physical impacts
 - Recovery generally on order of months to a few years, not decades (Neimi et al., 1990; Wallace, 1990)



CRWQCB. 2010. Attachment 1 to Order No. R9-2010-0062, STAFF REPORT, Dynegy South Bay, LLC, South Bay Power Plant, Evaluation of Water Intake and Wastewater Discharge Effects on San Diego Bay and Consideration of Termination of Discharge.

Neimi, G. J., DeVore, P., Detenbeck, N., Taylor, D., Lima, A., Pastor, J., Yount, J. D., Naiman, R. J. 1990. Overview of case studies on recovery of aquatic systems from disturbance. *Environ. Manage.* 14:571-587.

Wallace, J. B. 1990. Recovery of lotic macroinvertebrate communities from disturbance. *Environ. Manage.* 14:605-620 .



Conclusions

- Chemicals in sediment adjacent to South Bay Power Plant do not pose risks above background levels in San Diego Bay
 - Bioaccumulative chemical concentrations consistent with background and indicate absence of Site-specific human health and wildlife risk
 - SQO chemistry line of evidence indicates absence of SBPP chemical impacts to aquatic life
 - Analysis not limited to 0-5 cm layer, but includes deeper layers that would be expected to exhibit higher concentrations reflective of historical contributions
- Full SQO analysis of community and toxicity lines of evidence would either:
 - Not indicate impairment
 - Indicate impairment due to physical conditions not attributable to SDG&E operations
 - Indicate impairment due to chemicals not attributable to SDG&E operations